Sustainability 2.0
Sustainable strategies to build a more resilient world.

Our growing climate crisis demands that we conserve energy and water, reduce waste, and find ways to protect our ecosystems. And while governments and businesses across the globe are racing to set ambitious targets on a path to a net zero carbon future, its important to first know where we are in the journey. We need a common foundation to ensure that all emissions are measured in an accurate, consistent, and reliable way.

Sustainability-driven solution from Celebal Technologies are designed to help you achieve your sustainability goals and drive value from your business. Built on the modern-world technologies like Azure Digital Twin, IIoT, Data and Analytics, Machine Learning, and Extended Reality, the framework offers tools to achieve your Net-Zero Carbon Footprint.

Our Key Offerings

Approach

Concept	Consulting	Execution

Framework

Assess and Set Goals	Establish Data flow and Analysis	Set up Improvement Plans	Review, Report

Outcome

Data Quality Assurance	Regulatory Compliance	Comprehensive ESG Data Coverage	Efficient Data Retrieval	Social and Governance Performance Tracking	Real-time Data Integration
The data lake incorporates data quality assurance and validation processes to ensure the accuracy and reliability of ESG data, mitigating the risk of inaccuracies in reporting.	Organizations can use the data lake to ensure compliance with evolving ESG regulations and disclosure requirements, reducing compliance-related risks.	The ESG data lake provides a single, centralized repository for a wide range of ESG data, covering key areas such as carbon emissions, water usage, waste management, social impact, governance practices, biodiversity, and general business operations.	With a single source of truth, users can retrieve ESG data efficiently, reducing the time and effort required to access, analyze, and report on sustainability metrics.	The data lake enables organizations to track and evaluate their social and governance practices, ensuring compliance with regulatory requirements and alignment with ESG standards.	The data lake allows organizations to integrate real-time data feeds, enabling them to access the most up-to-date ESG information for their decision-making processes.

Carbon Trading Platform

Deals with all types of credits – CERs, VERs (GS, VERRA, GCC)
Would be extended to other types of environmental credits

Registrations | Trading Platform | Project, ERPA Tracker | Financing

Registrations
- ✓ Entity Registrations- buyers, sellers, aggregators
- ✓ Project Registrations

Trading Platform
- ✓ Portfolio presentations to Buyers
- ✓ Open Bids, Close/limited participation Bids
- ✓ Auctions/ Reverse Auctions

Project, ERPA Tracker
- ✓ Tracks projects from concept stage to issuance stage- entire life cycle*
- ✓ Transaction on Blockchain- issuance- trade- retire
- ✓ ERPA/ Contract Trackers (Long term, forward purchase) for buyers and Sellers- to track pre and post ERPA conditions, till ERPA is satisfied

Financing
- ✓ Development Project- presentation to investors
- ✓ To be introduced later- other green financing structures

Climate | Sustainability | Renewable Energy

Case Studies

Solution for Green Finance

One of the top Financial Institution partnered with Celebal to implement a solution for a sustainable green finance Project , a hub that helps SMEs calculate their carbon emissions on almost real time basis.

Challenges

In investing, ESG considerations are vital for financial institutions, but real-time carbon emission calculations for SME loan approvals pose challenges. Extended reporting timelines and labor-intensive sustainability reports delay financing access. Mandatory sustainability requirements worsen delays, highlighting the need for standardized frameworks and tech solutions for efficient ESG integration.

Solution

Using the Microsoft cloud, a seamless and compliant reporting platform was developed to address challenges in SMEs' sustainability reporting. This platform enables near-real-time generation of comprehensive reports and boasts a user-friendly interface that streamlines report creation, ensuring compliance with Singapore Exchange (SGX) standards. The solution facilitates prompt access to financial resources for SMEs, enhancing efficiency in loan applications and financial processes. Ultimately, it empowers SMEs to navigate ESG considerations more effectively, thereby ensuring their sustainable growth within the financial sector.

Benefits

- Streamlines SMEs' carbon emissions calculations for green financing.
- Reduces time and resources needed for carbon management.
- Enhances accuracy and reliability in emissions reporting.
- Supports SMEs in complying with sustainability regulations.
- Positions SMEs favorably for green financing opportunities.

ESG Solution for Electric Power Distribution Company

Celebal recently collaborated with a leading power generation organization based in Indonesia to create a streamlined process flow from their power plants to Microsoft Sustainability Manager for calculating carbon emissions and generating insightful reports.

Challenges

Energy companies face dual pressure to manage emissions for sustainability and regulatory compliance. Reporting is currently complex, time-consuming, and inefficient. Simplifying and streamlining emission tracking is crucial. Inadequate tracking could result in penalties and non-compliance, impeding progress towards emission targets.

Solution

Deployed an automated solution for calculating carbon emissions based on collected data: The system fetches fuel consumption data from power plants, eliminating manual entry and streamlining data retrieval through seamless integration with various sources. It ensures data integrity with automated consistency checks on uploaded evidence. By automating data collection and calculations, the solution enhances the accuracy of emissions reporting. Additionally, automated reports offer greater transparency into an organization's carbon footprint, facilitating informed decision-making for sustainability efforts.

Benefits

Streamlining time & resources goal of for carbon management decisions	Boosting accuracy & reliability in emissions reporting	Guaranteeing clear visibility & accessibility to stakeholders	Ensure better visibility and accessibility for all stakeholders	Captures the ultimate goal of data-driven decisions

National GHG Inventory

Celebal recently collaborated with a national authority responsible for a country's environmental performance to help them create a national GHG inventory management system based on the IPCC guidelines.

Challenges

Cumbersome PDF-based reporting hampers efficiency; real-time monitoring is lacking. Separate data processes for corporate and national levels create inconsistency. Absence of robust QA/QC procedures raises doubts about data reliability. Resource constraints limit advanced analytics.

Solution

Developed an intuitive interface and National GHG Inventory Management System. Automated data retrieval, scorecards for progress tracking, and interactive dashboards for informed decisions. Implemented checks for data consistency and reliability against user-uploaded evidence.

Benefits

References automation and reduced redundancy	Reduces time and resources needed for carbon management.	Enhances accuracy and reliability in emissions reporting.	Ensure better visibility and accessibility for all stakeholders	Captures the ultimate goal of data-driven decisions

---

CELEBAL TECHNOLOGIES

Traditional Enterprise Meets Modern Cloud Innovation

Advance Specializations on Azure

AI & Machine Learning | Analytics | Kubernetes | Infra and Database Migration to Microsoft Azure | Cloud Security | Low Code - No Code

Microsoft Solutions Partner

Microsoft
AI
Partner Of The Year
2023
Global

Rising Star Partner Of The Year - APAC 2023
Business Excellence Partner Of The Year - Singapore 2023
Azure Data & AI Partner Of The Year - Malaysia 2022
Country Partner Of The Year - India 2021 and 2022

databricks Elite Partner

databricks
Partner Of The Year
2022 & 2023
Asia Pacific and Japan
2 YEARS IN A ROW

databricks
Migrations
Partner Of The Year
2023
Asia Pacific and Japan

Top Consumption Partner - APJ 2022
Regional System Integration Partner - India 2021 and 2022

US | Canada | APAC | Japan | EMEA | India | Australia